PSM-2

Struers

Portable Microscope
Instruction Manual

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Tragbares Mikroskop
Gebrauchsanweisung

Microscope Portatif
Mode d’emploi

PSM-2

Portable Microscope

Instruction Manual

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User's Guide

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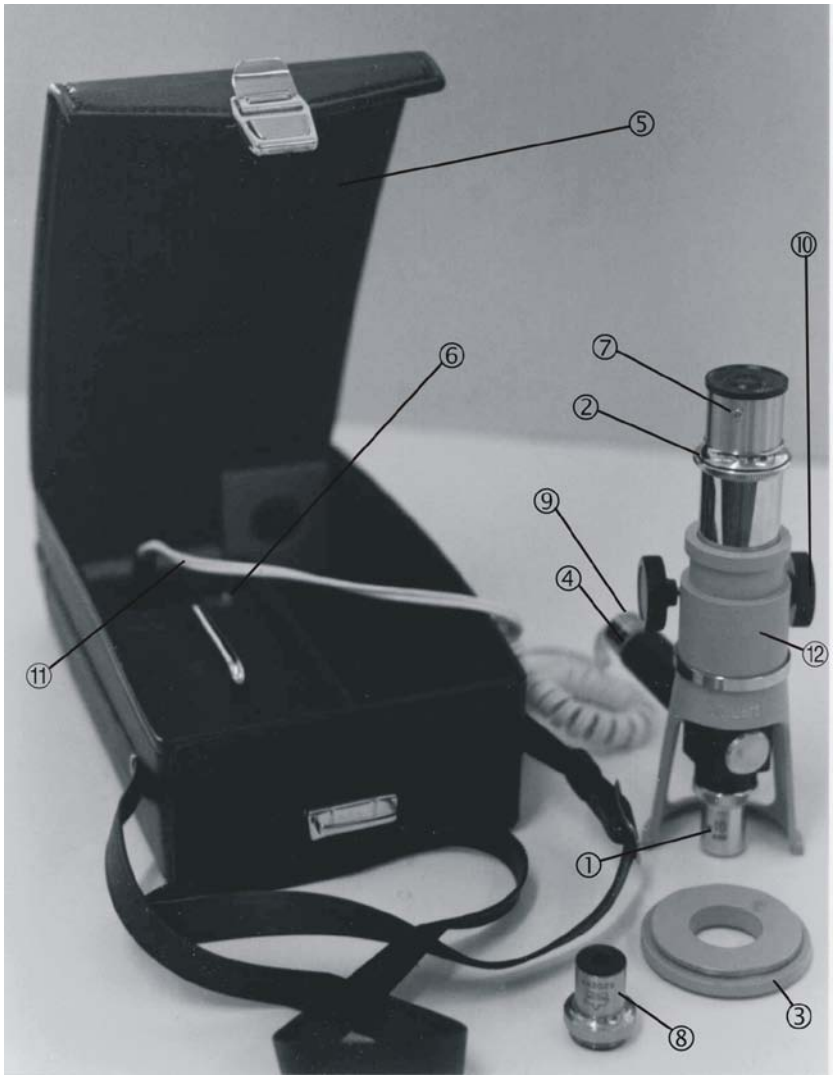
1. Getting Started

Description

PSM-2 is a monocular, non-inverted microscope with a battery driven lamp for primary structural analyses in reflected light. It is suited for on the spot examination of large objects during both the building and the operation processes. It can be used both on external surfaces and in corners, cavities and tubes. Further, PSM-2 is intended for control of structural impression, carried out with Transcopy Replica.



① 10x objective
② Locking ring to prevent the objective from touching the sample
③ Detachable base ring for examination on plane surfaces
④ Detachable lamp with cable
⑤ Carrying case with battery cassette
⑥ Switch and socket
⑦ 10x ocular

2. Operation

- Place the batteries in the battery cassette according to the diagram.
- Place the lamp in the socket of the microscope and the plug on the lead into the socket of the battery cassette. Set the switch to "On".
- Check that the base ring (4) has been mounted on the microscope, when using this for examination of plane or slightly curved surfaces and when examining Transcopy Replica.

Mounting the base ring

- The base ring has a bayonet fitting closure. Move the base ring, with the arrow pointing to the lamp house, into the threaded part and turn clockwise until the base ring is fixed.
- To remove the base ring, turn anti-clockwise until the arrow points to the lamp house and take the ring out.
- Fix the locking ring (3) in a position preventing the objective from touching the sample. Then the microscope is ready for use. The focusing is done by adjusting the focusing screws in the middle of the microscope.
- When changing the objective the base ring must be removed and the objective set to the lowest position. The objective is then unscrewed and removed to allow a new one to be fitted (Only tighten with fingers). The objective is set to a higher position and the base ring remounted.

TIPS

❑ When using the microscope for internal examinations of corners, cavities, etc., the base ring must be removed.

❑ Take care that the objective is not damaged by touching the sample.

Transcopy Replica

If the microscope is to be used for examination of structural impressions (Transcopy Replica), this must be glued onto a slide and then placed on a table with the structural surface uppermost. The microscope is positioned above the replica, which can be moved for viewing.

Remember...

Do not forget to switch off the lamp after use.

3. Measuring with PSM-2

Remove the eye piece by loosening the small screw on the side of the tube. Instead mount the measuring eye-piece and tighten the screw lightly. Focus on the micrometer plate and bring the scale in the measuring eye piece above the scale on the micrometer plate by moving and turning PSM-2. A possible correction factor is calculated according to proportion between, for instance, the full scale of the eye piece and the indication to which it corresponds on the measuring plate.

4. Technical Data

Ocular: 10x magnification
Objective: 10x magnification
Batteries: 4 pcs. 1.5 V, LR20, AM1, Size D
Lamp: 5 V, 6 W
Diameter: 15-60 mm
Length: 210 mm
Weight: 600 g

5. Accessories

Description	**Cat. No:**
Objective 20x magnification	04286901
Objective 40x magnification	04286902
Measuring ocular, metric units	04286903

Tragbares Mikroskop
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Benutzerhandbuch

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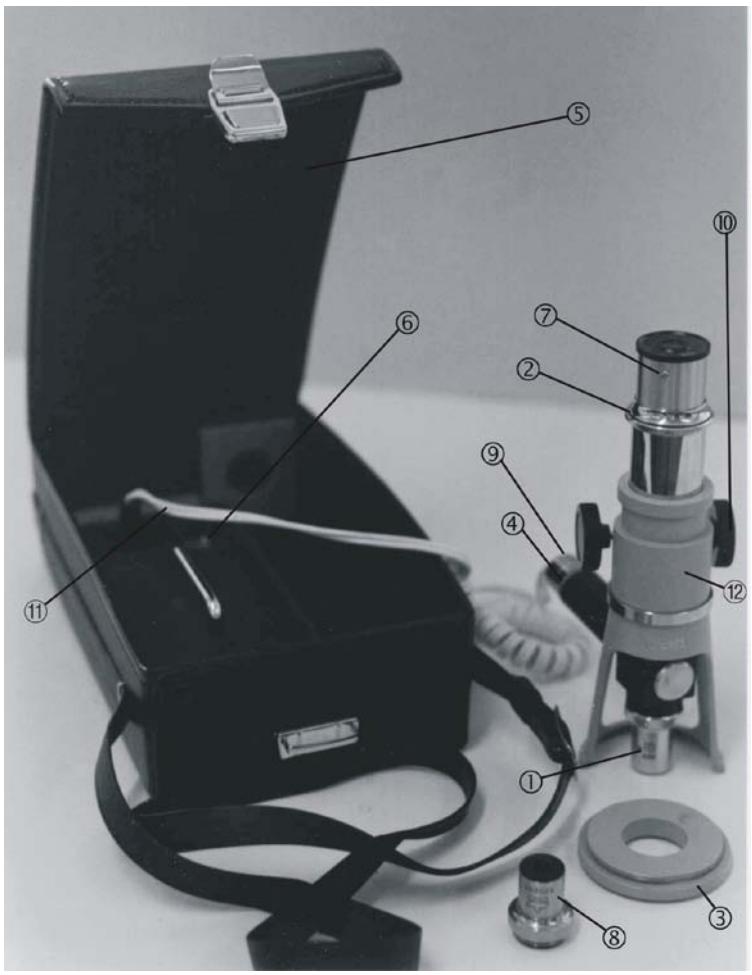
1. Zu Beginn

Beschreibung

PSM-2 ist ein monokulares, aufrechtes Mikroskop mit einer batteriegespeisten Lampe, für Gefügeuntersuchungen im reflektierten Licht. Es ist geeignet für Untersuchungen an der Stelle von großen Teilen am Bau oder im Betrieb. Es kann sowohl an äußeren Oberflächen als auch an inwendigen Flächen, in Ecken, Hohlräumen und Rohren ver wendet werden. PSM-2 ist außerdem zur Kontrolle von Gefügeabdrücken mit Transcopy Replica geeignet.



① Objektiv, 10x
② Einstellbarer Stoppring, der das Objektiv daran hindert, mit der Probe in Berührung zu kommen
③ Abnehmbarer Grundring, der bei Untersuchungen von planen Flächen verwendet wird
④ Auswechselbare Lampe mit Kabel
⑤ Transporttasche mit Batterie kassette
⑥ Schalter mit Anschluß buchse
⑦ Okular, 10x

2. Bedienung

- Die Batterien im Batteriekasten nach dem Diagramm in diesem anbringen.
- Die Lampe in der Fassung des Mikroskops und den Stecker in der Buchse des Batteriekastens anbringen. Den Schalter auf Stellung "On" stellen.
- Kontrollieren ob der Grundring (4) auf dem Mikroskop montiert ist, wenn dies zur Untersuchung von planen und leicht gekrümmten Flächen, sowie zur Untersuchung von Transcopy Abdrücken verwendet werden soll.

Montage des Grundrings

- Der Grundring hat eine Bajonettfassung. Der Grundring (mit dem Pfeil in Richtung Lampenhaus) einschießen und in Richtung des Uhrzeigersinns leicht festschrauben.
- Zum Abnehmen des Grundringes, diesen zurückdrehen (bis der Pfeil auf das Lampenhaus zeigt) und aus dem Gewindeteil herausziehen.
- Den Stoppring (3) in eine Position bringen, die gewährleistet, daß das Objektiv nicht mit der Probe in Berührung kommt. Das Mikroskop ist danach zur Anwendung bereit. Es wird durch Einstellen der Knöpfe in der Mitte des Mikroskops fokusiert.
- Bei Objektivwechsel wird der Grundring entfernt, und das Objektiv wird auf die niedrigste Position eingestellt. Danach wird das Objektiv abgeschraubt, und ein Neues wird festgeschraubt (nur fingerfest). Danach wird das Objektiv auf eine höhere Position eingestellt und der Grundring wieder aufgesetzt.

TIPS

❑ Bei Anwendung des Mikroskops für Untersuchungen von Ecken und Hohlräumen wird der Grundring entfernt.

❑ Bitte dafür sorgen, daß das Objektiv nicht durch Berührung mit der Probe beschädigt wird.

Transcopy

Wird das Mikroskop zur Untersuchung von Gefügeabdrücken (Transcopy) ver wendet, wird dieser auf einen Objektträger festgeklebt. Dies wird auf einem Tisch mit der Gefügeseite nach oben angebracht. Das Mikroskop wird über dem Abdruck angebracht, so daß dieser frei unter dem Mikroskop bewegt werden kann.

NB

Bitte die Lampe nach Gebrauch ausschalten.

3. Messen mit PSM-2

Das Okular wird durch Lösen der kleinen Schraube an der Seite des Tubusrohres herausgenommen. Das Meßokular wird an Stelle davon eingesetzt und die Schraube wird leicht festgespannt. Es wird auf die Mikrometerplatte scharf gestellt und die Skala des Meßokulars wird über die der Mikrometerplatte durch Drehen oder Bewegen von PSM-2 angebracht. Ein eventueller Korrektionsfaktor wird z.B. aus dem Verhältnis der vollen Skala des Okularanzeige entsprechend der Mikrometeranzeige auf der Meßplatte berechnet.

4. Technische Daten

Okular: 10x Vergrößerung
Objektiv: 10x Vergrößerung
Batterie: 4 Stck 1,5 V, LR20, AM1, Größe D
Lampe: 5V, 6W
Durchmesser: 15 - 60 mm
Länge: 210 mm
Gewicht: 600 g

5. Zubehör

Beschreibung	**Kat. Nr.:**
Objektiv, 20xVergrösserung	04286901
Objektiv, 40xVergrösserung	04286902
Meßokular, metrische Einheiten	04286903

Microscope Portatif

Mode d'emploi

Toujours mentionner le *n° de série* et la *tension/fréquence* de l'appareil lors de questions techniques ou de commandes de pièces détachées. Vous trouverez le n° de série et la tension de l'appareil indiqués soit sur la page de garde du mode d'emploi, soit sur une étiquette collée ci-dessous. En cas de doute, veuillez consulter la plaque signalétique de la machine elle-même. La date et le n° de l'article du mode d'emploi peuvent également vous être demandés. Ces renseignements se trouvent sur la page de garde.

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Guide de l'utilisateur

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1. Installation

Description

PSM-2 est un microscope droit, monoculaire avec une lampe alimentée par piles pour l'examen de structure en lumière réfléchie. Il permet l'examen in situé de grosses pièces de chantier aussi bien pour les surfaces externes que pour les surfaces internes comme les cavités, tuyaux etc. PSM-2 est également destiné au contrôle de répliques de structure effectuées avec les Transcopy Replica.

① Objectif 10x
② Bague d'arrêt réglable empêchant l'objectif de toucher l'objet
③ Bague de base d'étachable pour l'examen de surfaces planes
④ Lampe amovible avec câble
⑤ Pochette de transport
⑥ Alimentation avec interrupteur et douille de raccordement ainsi
⑦ Oculaire 10x

2. Opération

- Placer les piles dans la sacoche de transport comme indiqué sur le diagramme.
- Placer la lampe dans la douille du microscope. Mettre l'interrupteur dans la position "On".
- Contrôler que la bague de base (4) est montée sur le microscope quand celui-ci est utilisé pour des examens de surfaces planes ou légèrement courbées mais aussi pour des examens de Transcopy Replica.

Montage de la bague de base

- La bague de base est munie d'une fermeture à baïonnette. Tourner la bague de base dans la direction du boîtier de lampe en la fixant dans la direction de l'heure.
- Pour l'enlèvement de la bague de base, retourner celle-ci jusqu'à ce que la flèche ait la direction du boîtier de lampe et détacher la partie du filet.
- Fixer la bague de base en serrant la bague d'arrêt dans la position où l'objectif n'entrer pas en contact avec l'objet. Ensuite le microscope est prêt à l'usage. La focalisation se fait par réglage des boutons au milieu du microscope.
- Pour changer d'objectif il faut ôter la bague de base et mettre l'objectif dans sa position la plus basse. Puis deviser l'objectif et le remplacer par le nouveau (en le vissant manuellement). Ensuite régler l'objectif à sa position la plus haute et remonter la bague de base.

TIPS

❑ Pour utiliser le microscope aux examens de cavités, d'angles ou autres la bague de base peut être enlevée.

❑ Veiller à ce que l'objectif ne soit pas endommagé au contact de l'objet.

Transcopy Replica

Si le microscope est employé pour les examens de répliques de structure (Transcopy Replica), il est nécessaire de coller la réplique sur une lame de verre, la structure étant tournée vers le haut. Le microscope est ensuite placé au dessus de la réplique de telle sorte qu'elle puisse se mouvoir sans contrainte sous le microscope.

NB

Ne pas oublier de débrancher la lampe après usage.

3. Mesure avec PSM-2

Faire sortir l'oculaire en déserrant la petite vis du côté du tube. Remplacer l'oculaire par l'oculaire de mesure et serrer légèrement la vis. Focaliser sur la micromètre objet et mettre l'échelle dans l'oculaire de mesure au-dessus de l'échelle sur la micromètre objet en mouvant et tournant PSM-2. Un facteur de correction éventuel est calculé suivant le rapport entre, par exemple, l'échelle complète de l'oculaire et l'indication à laquelle il correspond sur la micromètre objet.

4. Données techniques

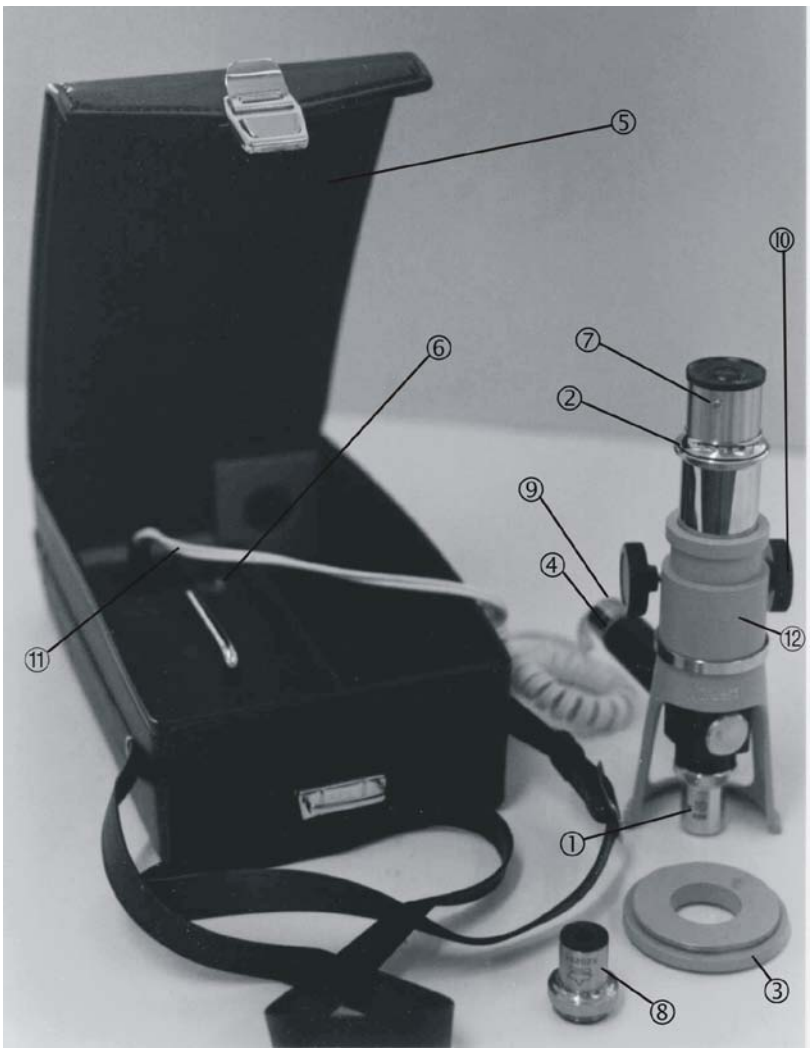
Oculaire: Grossissement 10 x
Objectif: Grossissement 10 x
Alimentation: 4 piles de 1,5 V, LR20, AM1, type D
Lampe: 5 V, 6 W avis
Diamètre: 15-60 mm
Longueur: 210 mm
Poids: 600 g

5. Accessoires

Description	**No. de cat.:**
Objectif Grossissement 20x	04286901
Objectif Grossissement 40x	04286902
Oculaire de mesure, système métrique	04286903

6. Spare Parts

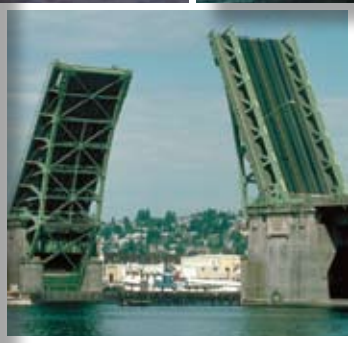
Pos.	Description	Spare Parts No.
1	Objective, 10x	428MP001
2	Locking ring with screw	428MP003
3	Base ring	428MP004
4	Lamp, complete, but without bulb	428MP005
5	Carrying case, complete	428MP007
6	Switch (in carrying case)	428MP008
7	Eye piece (10x)	428MP009
8	Optional eye piece (see accessories)	
9	Bulb	428MP006
10	Gear shaft with thumb wheels	428MP010
10A	Gear wheels (2 pcs)	428MP020
10B	Gear shaft / pinion	428MP030
10C	Rack	428MP012
10	Gear shaft with thumb wheels	428MP010
11	Cord with socket	428MP011
12	Main body	428MP002



On-site materialographic preparation and examination

Struers

Non-destructive preparation



Conventional materialographic preparation entails cutting a sample from a material. This method is not always appropriate as it destroys the component which is being examined.

Many applications require the ability to perform a materialographic preparation and examination without ensuing damage to the subject. The non-destructive method is used in these cases.

The usual preparation steps such as grinding, polishing and etching are performed on the part to be examined in a limited area where no damage can be done, whereupon the surface can be analysed.

On-site preparation is particularly suitable for quality checks in power stations, oil platforms, bridges, aircraft etc. The non-destructive preparation method enables the necessary inspection to be carried out on site.

Struers manufactures a complete range of portable equipment for non-destructive preparation, from basic grinding through mechanical and electrolytic polishing to electrolytic etching. The range also includes a portable microscope for on-site use and methods for producing replicas of the prepared surface.

Using replica methods makes it possible to perform the microscopic examination in the laboratory - under perfect working conditions.

The entire Struers non-destructive preparation range has been designed for field work. The equipment is thus as compact and as light as possible. It is easy to transport and can be used literally under any conditions.

Transpol-2

Movipol-3

All the necessary accessories are contained in Transpol-2's carrying case.

Due to the special design of the polishing pencil, electrolytic polishing with Movipol-3 is quick and uncomplicated

Transpol-2 - Mechanical grinding and polishing under all working conditions

Transpol-2 is a portable grinding and polishing apparatus. It is extremely compact and is designed for field work under even the most difficult conditions. Transpol-2 fits into a practical shoulder bag with all the necessary accessories and weighs an approximate total of only 5 kg.
Transpol-2 consists primarily of 2 parts: a control unit and a grinding and polishing unit. The control unit comprises the power supply and speed regulator unit (100-7000 rpm). The grinding and polishing unit is connected to the control unit by a soft, flexible cable. It consists of a direct current motor with a holder with an easily exchangeable rubber disc, upon which the grinding paper and polishing cloth are mounted.

Transpol-2 is available with two types of holder: one for straight mounting and one for right-angle mounting, thus making it possible to use Transpol-2 in even the most inaccessible places.

Grinding

Transpol-2 uses 32 mm diameter SiC grinding paper discs in grit sizes 60, 120, 240 and 500#. Transpol-2 also includes a special flapper wheel for grinding of extremely uneven surfaces.

Polishing

Transpol-2 uses DP-Dac, DP-Dur, DP-Mol, DP-Nap and OP-Felt polishing cloths, all 32 mm diameter, and DP-Paste, DP-Stick or DP-Spray. Transpol-2 is furthermore delivered with a special felt cone for polishing of uneven and curved surfaces.

Movipol-3 - Electrolytic polishing and etching in the field

Movipol-3 is a portable electrolytic metal polishing and etching apparatus. It is extremely compact and robust and can be used anywhere. Electrolytic preparation is a particularly fast and efficient method of non-destructive metallographic preparation. It can be applied directly to critical surfaces and is widely used for metal safety inspection, especially for critical parts of larger units, e.g. for welds and other joints. The method effectively reveals changes in the microstructure of the metal and allows to prevent possible damage because of cracks and leaks.

Automatic polishing and etching

Movipol-3 consists of a compact unit comprising the power supply, control unit, pump motor, electrolyte container and polishing unit. When the polishing unit is pressed against the metal surface, an electrolytic reaction is started. After 5-10 seconds of use, the prepared area is as reflective as a mirror and etching can commence.

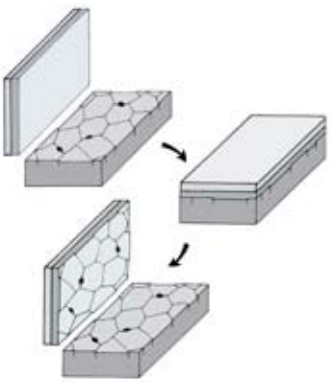
PSM-2 Transcopy

The entire process is automatic: after completion of the polishing, Movipol-3 proceeds to the etching process. When this is finished, the unit emits an audio signal. In less than one minute a surface is obtained which is ready for analysis, either on-site or by means of replica for laboratory examination.

Complete Freedom
Movipol-3 is equipped with rechargeable batteries and supply transformer. In other words, the apparatus is as suitable for stationary laboratory work as it is for field work, depending on the requirements.

PSM-2 and Transcopy constitute an indispensable tool for non-destructive materialography.

Transcopy



With Transcopy, Replica foil, replicas can be taken on the spot for subsequent examination in the laboratory.

PSM-2 - Fast and easy microscopy outside the laboratory
PSM-2 is a small, portable microscope for use in the field. It is battery-powered and provides magnifications of 100 x, 200 x and 400 x. PSM-2 comes in a shoulder bag which also contains the batteries.

PSM-2 is particularly suitable for preliminary examination of the prepared surface. A replica is recommended if a more detailed analysis is required. PSM-2 is highly suitable for preliminary replica examinations when used together with Transpol-2 and Movipol-3.

Transcopy Replica Foil
Transcopy Replica Foil is used to make a replica of any polished and etched surface. It is especially used if on-site analysis using a portable microscope is not sufficient or if micrographs of the prepared structure are required. Transcopy Replica Foil creates a permanent replication of microstructures, cracks and defects for future analysis and comparison in the laboratory.

Function
Transcopy Replica Foil consists of reflecting plastic film with a self-adhesive back. A replica is made by applying Transcopy fluid to the film and pressing it firmly onto the prepared and etched surface. A slightly over etched structure results in a higher contrast of the replica. After 4-5 minutes the foil is removed from the surface. By removing the cover paper, the replica can be adhered to a plain plate and then examined under an optical microscope.

RepliSet

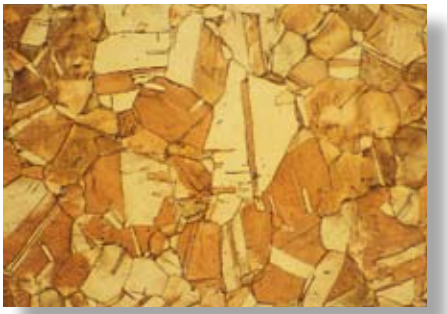
An operator dispenses RepliSet onto a sample, and then peels off the cured replica.

The **RepliSet** system is designed to produce an exact 3D copy of a surface. It is used for non-destructive testing and field applications allowing the structure or irregularities on critical components to be examined and measured under laboratory conditions.

RepliSet is a specially formulated fast curing two-part silicone rubber with a good releasing ability for flexible high-resolution 3D replicas, which behave like a metallic surface when examined in an optical microscope.
RepliSet compounds are supplied in cartridges and are dispensed using a hand-operated dispensing gun. The cartridges contain both polymer and curing agent, which are automatically mixed in a disposable static-mixing nozzle during application to the surface. The application system offers superior and fast results, regardless of the conditions.

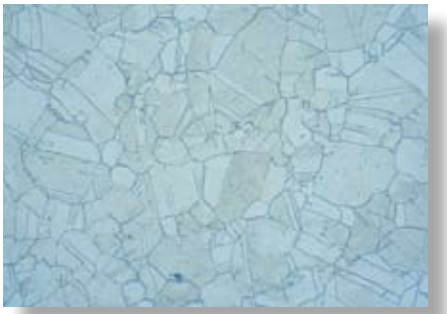
RepliFix is a less advanced parallel to RepliSet. RepliFix and RepliSet are designed to bond together. The two components are mixed and applied by hand. RepliFix is used as support for RepliSet or as a stand alone product for moulding of surface shape for low tech applications.
A backing slide bonds to the RepliSet or RepliFix replica. The backing slide serves to maintain the original profile and ensures a flat back to the replica.

A replica can be taken from all metallic materials and most other solid materials like ceramics, plastics and glass. There are no size, shape or thickness limitations on the replicas that can be made and it is even possible to take replicas from othervise inaccessible surfaces.
The RepliSet system can produce replicas, which at the same time are dimensionally correct, with ultra fine detail reproduction and with a flat back.



Pure copper.
Sample etched with cupric chloride and ammonia.
Magnification 100 x

Sample



Replica

Further to examination by optical microscopes, 3D examination can be carried out using non-contact measuring instruments such as laser measuring equipment or measuring projectors with 2D or 3D facilities. A replica of a cavity, for instance inner holes, can be examined using measurement and profile projectors. The replicas are suitable for 3D examination by SEM.

Metallographic applications

Typical applications are on-site non-destructive testing in connection with quality control, inspection and maintenance of power plants, oil platforms, bridges, aircraft, etc.
Water or high temperatures do not affect RepliSet so the application range is very broad.

Typical tasks are:

- Quality control of edges, corners, heights, angles, surface finish and other dimensions.
- Inspection of internal surfaces such as bolt hole threads.
- Detection and monitoring of pitting, corrosion, cracking, creep and wear.
- Metrology.
- Forensic investigation.

RepliSet 50 ml system.

Case for RepliSet

The RepliSet Case is designed for transportation and use of the 50 ml RepliSet system. It is made of aluminium and is at the same time elegant and sturdy. It can be carried as hand luggage on flights and is compact and sturdy to such an extent, that it can be taken to locations with narrow or difficult access.

The contents is either fixed by straps in the lid or placed in compartments in the two detachable foam rubber inserts. Each item has its fixed position. The user has access to all that is needed to perform a regular replication by just opening the lid of the RepliSet Case. The lower insert carries a small stock of consumables.

Transpol-2

Technical Data

Voltages	230 V, 50/60 Hz; 120 V, 50/60 Hz;	
Speed	100-7000 rpm	
Dimensions (without shoulder bag)	Width	180 mm
	Height	75 mm
	Depth	150 mm
Total weight incl. accessories	5 kg	

Specifications	**Cat. no.**
Transpol-2, complete with soft cable, DC motor 230 or 120 V, straight handle, right angle handle, flapper wheel, felt cone, 4 rubber discs	059561xx
Rubber disc, 30 mm dia.	40800055
SiC grinding papers, adhesive, bundle of 100	
Grit 60	40400049
Grit 120	40400129
Grit 240	40400130
Grit 500	40400131
DP cloths, adhesive, dia. 32 mm, bundle of 25	
DP-Dur	40500040
DP-Dac	40500145
DP-Mol	40500041
DP-Nap	40500042
OP-Felt	40500043
Flapper wheel, 80 grit, 40 mm dia. x 10 mm	40800053

Movipol-3

Technical Data

Voltage supply to transformer	220 V 50/60 Hz, 115V 50/60 Hz	
Voltage supply from transformer	42 V AC	
Input fuse	5 A	
Battery fuse	10 A	
Thermal overload protection		
Polishing power	Max. 140 VA	
Polishing area	About 9 mm dia	
Dimensions	Width	410 mm
	Height	280 mm
	Depth	200 mm
Weight with batteries, but without electrolyte	Net	8.80 kg

Specifications	
Movipol-3, complete with batteries and supply transformer, 220 V or 115 V	039265xx
42 V charging/supply transformer for continuous use for Movipol 3, 230 V or 115 V	044462xx
Set of extra batteries (9 pcs.)	03926901
Polishing Chambers for Movipol-3, Flexible type, 10 pcs.	03926904

PSM-2

Technical Data

Batteries	4 x 1.5 V, type LR20	Length	210 mm (8.3")
Lamp (threaded base)	5 V, 6 W	Diameters	15-60 mm (0.6"-2.4")
		Weight	600 g

Specifications	
Portable microscope PSM-2, complete with 10 x eyepiece, 10 x objective, lamp housing and carrying case, without batteries	04286101
Objective, magnification 20 x	04286901
Objective, magnification 40 x	04286902
Measuring set consisting of measuring eye piece and plate micrometer	04286903

Transcopy

Transcopy Kit

Set consisting of 40 ml Transcopy Liquid, 50 replica foils 20 x 30 mm (0.8" x 1.2"), 1 pipette, spray nozzle and 50 microscope slides 25 x 75 mm (1" x 3")	40900090
Transcopy Replica Foils, 50 pcs.	40900091
Transcopy Liquid, 40 ml	40900092

RepliSet

Technical Data

Resolution of cu red replica	Down to 0.1 micron
Shrinkage	Negligible
Tear Strength	15-20 kN/m^2
Temperature range for the surface to be examined	-10ºC to +180ºC
Life span of the finished replicas is practically indefinite provided they are stored according to the instructions.	
Content in static-mixing nozzle	1.1 ml in nozzle for 50 ml cartridge 9.3 ml in nozzle for 265 ml cartridge

Specifications

Replication system for non-destructive testing of a microstructure or a 3D structure. Fast curing two-part silicon rubber compound for flexible high-resolution 3D replicas. For the 50 ml system, the hand-operated dispensing gun (40900066) and the static mixing nozzles (40900088) are used in combination with the 50 ml cartridges.
For the 265 ml system, the hand-operated dispensing gun (40900065) and the static-mixing nozzles (40900056) are used in combination with the 265 ml cartridges

Specifications	Cat. no.
RepliSet-F1	
Particularly useful for replicating horizontal or sloping surfaces in low temperature conditions or where rapid results are required. Fluid rapid curing compound with working life of 0.5-1 min. and curing time of 4 min. at 25°C	
1 cartridge of 50 ml	40900069
5 cartridges of 50 ml	40900047
2 cartridges of 265 ml	40900051
RepliSet-F5	
General purpose material. Particularly useful for replicating horizontal or sloping surfaces in normal or high temperature conditions. Fluid fast curing compound with working life of 5 min. and curing time of 18 min. at 25°C	
1 cartridge of 50 ml	40900068
5 cartridges of 50 ml	40900046
2 cartridges of 265 ml	40900050
RepliSet-T1	
Particularly useful for replicating vertical or overhead surfaces in low temperature conditions or where rapid results are required. Thixotropic rapid curing compound with working life of 0.5-1 min. and curing time of 4 min. at 25°C	
1 cartridge of 50 ml	40900071
5 cartridges of 50 ml	40900049
2 cartridges of 265 ml	40900053
RepliSet-T3	
General purpose material. Particularly useful for replicating vertical or overhead surfaces in normal or high temperature conditions. Thixotropic fast curing compound with working life of 3 min. and curing time of 10 min. at 25° C	
1 cartridge of 50 ml	40900070
5 cartridges of 50 ml	40900048
2 cartridges of 265 ml	40900052
RepliSet-GF1	
Replication system especially for comparatory macroscopy and metrology. Particularly useful for replicating horizontal or sloping surfaces and filling holes. Fluid rapid curing compound with working life of 0.5 - 1 min. and curing time of 4 min. at 25°C.	
1 cartridge of 50 ml	40900078
5 cartridges of 50 ml	40900076
RepliSet-GT1	
Replication system especially for comparator macroscopy and metrology. Particularly useful for replicating vertical or overhead surfaces. Thixotropic rapid curing compound with working life of 0.5 - 1 min. and curing time of 4 min. at 25°C.	
1 cartridge of 50 ml	40900079
5 cartridges of 50 ml	40900077

RepliFix

Specially formulated hand mixed fast curing two-part silicone rubber. Bonds to RepliSet. Particularly useful in combination with RepliSet for producing a rigid backing. It can be used directly for moulding of surface shape for profile measurement

RepliFix-2	
For low temperature conditions or where rapid results are required. Working life of 2-3 min. and curing time of 10 min. at 25°C. Net 500 g	40900084
RepliFix-20	
For high temperature conditions or for taking replicas of complicated geometry or large areas. Working life of 20 min. and curing time of 60 min. at 25°C. Net 500 g	40900086

Accessories

Hand-operated dispensing gun	
For 50 ml cartridges of RepliSet	40900066
For 265 ml cartridges of RepliSet	40900065
Static-mixing nozzles	
For 50 ml cartridges. 35 pcs.	40900088
For 265 ml cartridges. 10 pcs.	40900056
Nozzle Tips	
For replicating flat surfaces. Fishtail spreaders, 10 mm width. To be mounted on 50 ml static mixing nozzle (40900088). 30 pcs.	40900089
For replicating small holes. Luer needle, 1 mm dia., 30 mm long. To be mounted on 50 ml static-mixing nozzle (40900088). 10 pcs.	40900060
For replicating larger holes. Flexible hose, 6 mm dia., 100 mm long. To be mounted on 50 ml static-mixing nozzle (40900088) 10 pcs.	40900061
Backing Slides	
A flexible plastic slide, which bonds to the replica and ensures a flat back to the replica. For levelling of replicas to assist microscopic examination, as dimensional support for metrology and for well-ordered labelling, transport and storage of RepliSet replicas 26 x 76 x 1 mm, 50 pcs.	40900087
Backing paper	
For RepliSet replication system. Bonds to the replica and facilitates labelling, handling and the levelling of replicas to assist microscopic examination. 60 x 70 mm. 100 pcs.	40900062
A4 (210 x 297 mm), for cutting up to the required size. 10 pcs.	40900063
Case for RepliSet 50 ml system	
Aluminium case with room for all necessities for field applications. The contents of the RepliSet Case is ordered separately	40900067

Struers' products are subject to constant product development.
Therefore, we reserve the right to introduce changes in our products without notice.

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